

Claims

[c1] What Is Claimed Is:

1.A locking mechanism for an external optical disk drive with a cover and an upper housing, comprising:

an elastic member, having two connecting ends;

a rotary shaft, integrally formed with the cover and having a hole adapted to receive one of the connecting ends;

a locking member, positioned on the upper housing; and

a mounting member, positioned on the upper housing and adapted to fasten the other one of the connecting ends.

[c2] 2.The locking mechanism as claimed in claim 1, wherein the elastic member is of metallic material and can be a torsion spring.

[c3] 3.The locking mechanism as claimed in claim 1, wherein the elastic member is of plastic and can be a torsion spring.

[c4] 4.The locking mechanism as claimed in claim 1, further comprising a gear rack that is integrally formed with the rotary shaft of the cover.

[c5] 5.The locking mechanism as claimed in claim 4, further comprising a spur gear that is positioned on the mounting member and is adapted to engage with the gear rack.

[c6] 6.A locking mechanism for an external optical disk drive with a cover and an upper housing, comprising:
an elastic member, having two connecting ends;
a rotary shaft, integrally formed with the cover and having a hole adapted to receive one of the connecting ends;
a gear rack, integrally formed with the rotary shaft;
a mounting member, positioned on the upper housing and adapted to fasten the other one of the connecting ends;
a spur gear, positioned on the mounting member and adapted to engage with the gear rack; and
a locking member, positioned on the upper housing.

[c7] 7.The locking member as claimed in claim 6, wherein the elastic member is of metallic material and can be a torsion spring.

[c8] 8.The locking mechanism as claimed in claim 6, wherein the elastic member is of plastic and can be a torsion spring.

[c9] 9.An external optical disk drive, comprising:

a lower housing;
an upper housing, positioned at the lower housing;
a locking member, positioned on the upper housing;
an elastic member, having two connecting ends;
a cover, having a rotary shaft and a gear rack and having
a hole to be adapted to receive one of the connecting
ends of the elastic member;
a mounting member, positioned on the upper housing
and adapted to fasten the other one of the connecting
ends; and
a spur gear, positioned at the mounting member;
wherein the cover is opened or closed, the spur gear will
engage with the gear rack of the cover.

[c10] 10. The external optical disk drive as claimed in claim 9,
wherein the elastic member is of metallic material and
can be a torsion spring.

[c11] 11. The external optical disk drive as claimed in claim 9,
wherein the elastic member is of plastic and can be a
torsion spring.